

## DEVELOPING LOW RISK MANAGEMENT STRATEGIES FOR ARGENTINE ANTS

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Ant control is a major source of revenue in structural pest control. The Argentine ant is the major urban ant pest in California. Regulatory agencies in California are concerned about pesticides appearing in water runoff. If pesticide runoff is not reduced, pesticides upon which consumers and industry currently rely for ant control may be restricted or removed from the market.

Research Objective:

- Find the most effective and least toxic means of controlling Argentine ants by comparing the efficacy of fipronil, bifenthrin, and cyfluthrin using perimeter and spot treatments
- Find the technique that gives the least insecticide runoff by comparing several application techniques and measuring insecticide runoff

**Summary:**

Dr. Klotz proposes to select thirty homes in the Riverside area, plus five homes as untreated control sites. In years one and two, population estimates will be arrived at for each property. Six different treatments, each replicated five times, will be applied around the outside of the homes. The efficacy of each treatment will be evaluated. Three of the five homes from each of the six treatments will be monitored for runoff of insecticide. The third year element is the consideration of additional mitigation of the runoff by using temporary barriers to prevent the insecticide from reaching the street.